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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,355	11/26/2003	Kuang-Ping Ma	3313-1068P	6153
	7590 01/26/200 ART KOLASCH & BI	EXAMINER		
PO BOX 747 FALLS CHURCH, VA 22040-0747			WILLIAMS, LAWRENCE B	
			ART UNIT	PAPER NUMBER
			2611	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE	
3 MOR	NTHS	01/26/2007	ELECTRONIC	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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	Application No.	Applicant(s)			
	10/721,355	MA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Lawrence B. Williams	2611			
The MAILING DATE of this communication app	· ·				
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on <u>26 Not</u> This action is <b>FINAL</b> . 2b)⊠ This     Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final.				
Disposition of Claims					
4) ☐ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) 1,3,5 and 8 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or		•.			
<ul> <li>9) ☐ The specification is objected to by the Examiner.</li> <li>10) ☐ The drawing(s) filed on 26 November 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</li> <li>11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</li> </ul>					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

#### **DETAILED ACTION**

# Specification

1. The abstract of the disclosure is objected to because the examiner suggests "despreading' in stead of "dispreading" in line 3 of the abstract.

Correction is required. See MPEP § 608.01(b).

- 2. The disclosure is objected to because of the following informalities:
- a.) The examiner suggests, "spread spectrum (SS) signal" instead of "spread spectrum (SS)" in line 12 of page 3.
  - b.) The examiner suggests "SS signal" instead of "SS" for clarity in lines 18-21 of page 3.
- c.) Lines 20-21; "if the SS is in the negative phase; when the SS is in the negative phase, its peak sign assignment value is negative" of page 3 are unclear.
- d.) The examiner suggests "despreads the preamble message" and "despreading" instead of "dispreading" in line 6 of page 4. The examiner suggests applicant review the disclosure and make this correction for clarity as "dispreading" is used in multiple occurrences throughout the disclosure.
  - e.) The examiner suggests "according to a predetermined " in line 11 of page 4.
- f). Lines 12-13; "First, the system receives a preamble message containing a spread spectrum of a series" of page 4 are unclear. Applicant makes multiple references of the term "series" throughout the disclosure. It is unclear as to what is exactly meant by applicant with the use of "series".

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g.) The examiner suggests "rest of the discrete signals" in line 13 of page 5.

h.) Line 16 of page 5, the examiner suggests, "the maximum accumulation".

i.) Lines 23-24 of page 6, the examiner suggests, "the maximum accumulation".

Appropriate correction is required.

3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of

which applicant may become aware in the specification.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

a.) The examiner suggests, "spread spectrum signal" in line 3 of the claim.

b.) The examiner suggests "despreading" instead of "dispreading" in line 4.

c.) Claim 1 recites the limitation "storing the results" in line 16. There is insufficient

antecedent basis for this limitation in the claim. The examiner suggests, "storing the products".

d.) Claim 1 recites the limitation "the accumulated values" in line 16. There is

insufficient antecedent basis for this limitation in the claim. The examiner suggests "the

accumulated products".

e.) The examiner suggests, "with a maximum accumulation" in line 17 of the claim.

f.) The examiner suggests, "with the maximum accumulation" in line 18 of the claim.

Appropriate correction is required.

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5. Claim 3 is objected to because of the following informalities:

- a.) The examiner suggests, "spread spectrum signal" in line 3 of the claim.
- b.) The examiner suggests "despreading" instead of "dispreading" in line 4.
- c.) Claim 3 recites the limitation "equating the result" and "storing the results" in lines 14 and 15, respectively. There is insufficient antecedent basis for this limitation in the claim.
- d.) Claim 3 recites the limitation "the accumulated values" in line 17. There is insufficient antecedent basis for this limitation in the claim.
  - e.) The examiner suggests, "with a maximum accumulation" in line 18 of the claim.
  - f.) The examiner suggests, "with the maximum accumulation" in line 19 of the claim.

    Appropriate correction is required.
- 6. Claim 5 is objected to because of the following informalities:
  - a.) The examiner suggests, "spread spectrum signal" in line 3 of the claim.
  - b.) The examiner suggests "despreads" instead of "dispreads" in line 4.
- c.) Claim 5 recites the limitation "the results" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim.
  - d.) Claim 5 recites the limitation "the accumulated values" in line 15.
  - e.) The examiner suggests, "with a maximum accumulation" in line 16 of the claim.

    Appropriate correction is required.
- 7. Claim 8 recites the limitation "the channel signal" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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8. Claims 1, 3, 5 are objected to because of the following informalities: Claims 1, 3, and 5 all recite the phrase "temporarily storing the results to a second data frame, a third frame,..., and the Nth data frame". The examiner suggests, "temporarily storing the results to a second data through N<sup>th</sup> data frame."

### Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 10. Claims 1-2 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 recites the limitation "(a) receiving a preamble message of a spread spectrum (the examiner assumes applicant means spread spectrum signal) that contains a series" in line 3 of the claim. It is unclear as what exactly is meant by series. The specification gives no description as to what the term "series" encompasses.

Claim 2 is rejected based on its dependency upon rejected claim 1.

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11. Claims 3-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 recites the limitation "(a) receiving a preamble message of a spread spectrum (the examiner assumes applicant means spread spectrum signal) that contains a series" in line 3 of the claim. It is unclear as what exactly is meant by series. The specification gives no description as to what the term "series" encompasses.

Claim 4 is rejected based on its dependency upon rejected claim 3.

12. Claims 5-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 5 recites the limitation, "a despreader, which receives a preamble message of a spread spectrum (the examiner assumes applicant means spread spectrum signal) that contains a series" in lines 3-4 of the claim. It is unclear as what exactly is meant by series. The specification gives no description as to what the term "series" encompasses.

Claims 6-8 are rejected based on its dependency upon rejected claim 3.

#### Conclusion

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- 13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a.) Challa et al. discloses in US Patent 7,020,180 B2 Method and Apparatus For Acquiring Pilots Over Code Space and Frequency Errors In A CDMA Communication System.
- b.) Shan discloses in US Patent 7,054,396 B2 Method and Apparatus For Multipath Signal Compensation In Spread-Spectrum Communications Systems.
- c.) Tanaka et al. discloses in US Patent 5,764,685 Method of Setting Spread Code Series and Communication Apparatus Using Spread spectrum Communication Method.
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037. The examiner can normally be reached on Monday-Friday (8:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ghayour Mohammad can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Lawrence B. Williams

lbw

January 21, 2007